

REMARKS

The foregoing amendment to the claims is being offered in a format acceptable to the U.S. Patent and Trademark Office. The amendment of the claims incorporates those changes occurring during the Chapter II phase of the corresponding PCT application. No new matter is presented by this Amendment. Entry of this amendment by the Examiner is respectfully requested.

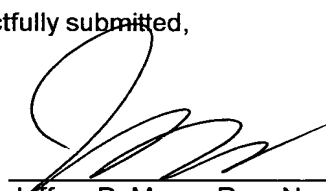
Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached paper is captioned "**Version with Markings to Show Changes Made.**"

Authorization is given to charge payment of any fees required, or credit any overpayment, to Deposit Acct. 13-4213. A duplicate of this paper is enclosed for accounting purposes.

Respectfully submitted,

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Version with Markings to Show Changes Made

1. (Twice Amended) An apparatus [(1)] for measuring a volume of a quantity of a liquid, [for example, in connection with a medical diagnostic test,] comprising at least one chamber [(2)] for receiving the liquid, which chamber [(2)] comprises a bottom [(3)] and upright side walls [(4)] and at least two electrodes [(5)] to connect to a voltage source and to a measuring system for determining the electrical impedance between the electrodes, [characterized in that] wherein the electrodes are incorporated in the bottom [(3)] of the chamber [(2)], allowing the electrical impedance of the liquid itself to be determined.

2. (Amended) An apparatus according to claim 1, [characterized in that] wherein the bottom [(3)] of the chamber [(2)] is substantially formed by a glass substrate [(9)].

3. (Amended) An apparatus according to claim 2, [characterized in that] wherein the electrodes [(5)] are provided on the glass substrate [(9)], and are embedded in an insulation layer [(10)] provided on the glass substrate [(9)].

4. (Twice Amended) An apparatus according to [the] claim 3, [characterized in that] wherein the upright side walls [(4)] are formed by etching insulation material provided on the insulation layer [(10)].

5. (Amended) An apparatus according to claim 1, [characterized in that] wherein the bottom [(3)] of the chamber [(2)] is substantially formed by a silicon wafer [(6)].

6. (Amended) An apparatus according to claim 5, [characterized in that] wherein the silicon wafer [(6)] is provided with a first insulation layer [(7), preferably of SiO₂].

7. (Amended) An apparatus according to claim 6, [characterized in that] wherein the electrodes [(5)] are provided on the first insulation layer [(7)] of the silicon wafer [(6)] and are embedded in a second insulation layer [(8)], [preferably Si_xN_y], which is provided on the first insulation layer [(7)].

8. (Twice Amended) An apparatus according to claim 7, [characterized in that] wherein the upright side walls [(4)] are formed by etching insulation material provided on the second insulation layer [(8)].

9. (Amended) An apparatus according to [one of the preceding claims] claim 1, [characterized in that] wherein the volume of said at least one chamber [(2)] is maximally 2 nanolitres.

10. (Twice Amended) An apparatus according to [one of the claims 1-9, characterized in that] claim 1, wherein said apparatus [the same] comprises a plurality of chambers [(2)] arranged in an array.

11. (Amended) An apparatus [for measuring a quantity of liquid] according to [one of the preceding claims, characterized in that] claim 1, wherein said apparatus [it] is connected to an alternating voltage source having a frequency of at least approximately 15 kHz.

Add new claims:

--12. An apparatus according to claim 6, wherein said first insulation layer comprises SiO_2 .

13. An apparatus according to claim 7, wherein said second insulation layer comprises Si_xN_y .--